WHAT IS CLAIMED IS:

1. For use with a fast pattern processor having an internal function bus, an external device transmission system, comprising:

a context memory subsystem configured to maintain a plurality of argument signature registers, each of said plurality of argument signature registers being associated with a corresponding context and containing a corresponding argument;

a pattern processing engine configured to dynamically modify an argument and generate a transmit command as a function of a context associated with said modified argument; and

an output interface subsystem configured to receive said transmit command, and transmit said modified argument based upon said transmit command to an external device.

2. The external device transmission system as recited in Claim 1 wherein said modified argument contains data selected from the group consisting of:

an external device command,

a routing parameter, and

a protocol data unit classification.

3. The external device transmission system as recited in Claim 1 wherein said corresponding argument is 64 bits wide.

4. The external device transmission system as recited in Claim 1 wherein said output interface subsystem is further configured to transmit portions of a protocol data unit and said modified argument to said external device.

5. The external device transmission system as recited in Claim 1 wherein said external device is a routing switch processor.

6. The external device transmission system as recited in Claim 1 wherein said pattern processing engine is further configured to dynamically modify said modified argument based upon a content of a protocol data unit.

7. The external device transmission system as recited in Claim 1 wherein said pattern processing engine is configured to employ a sequence of operating instructions defined by a functional programing language.

8. For use with a fast pattern processor having an internal function bus, a method for transmitting commands to an external device, comprising:

maintaining a plurality of argument signature registers, each of said plurality of argument signature registers being associated with a corresponding context and containing a corresponding argument;

dynamically modifying an argument;

generating a transmit command as a function of a context associated with said modified argument; and

transmitting said modified argument based upon said transmit command to an external device.

9. The method as recited in Claim 8 wherein said modified argument contains data selected from the group consisting of:

an external device command,

a routing parameter, and

a protocol data unit classification.

10. The method as recited in Claim 8 wherein said corresponding arguments are 64 bits wide.

11. The method as recited in Claim 8 wherein said transmitting further comprises transmitting portions of a protocol data unit and said modified argument to said external device.

12. The method as recited in Claim 8 wherein said external device is a routing switch processor.

13. The method as recited in Claim 8 wherein said dynamically modifying further comprises dynamically modifying said modified argument based upon a content of a protocol data unit.

14. The method as recited in Claim 8 wherein said dynamically modifying employs a sequence of operating instructions defined by a functional programing language.

15. A fast pattern processor, comprising:

an internal function bus;

an external device transmission system, including:

a context memory subsystem that maintains a plurality of argument signature registers, each of said plurality of argument signature registers being associated with a corresponding context and containing a corresponding argument,

a pattern processing engine that dynamically modifies an argument and generates a transmit command as a function of a context associated with said modified argument, and

an output interface subsystem that receives said transmit command, and transmits said modified argument based upon said transmit command to an external device; and

a data buffer controller that stores configuration information into a portion of said context memory subsystem associated with said corresponding context.

16. The fast pattern processor as recited in Claim 15 wherein said modified argument contains data selected from the group consisting of:

an external device command,

a routing parameter, and

a protocol data unit classification.

17. The fast pattern processor as recited in Claim 15 wherein said corresponding argument is 64 bits wide.

18. The fast pattern processor as recited in Claim 15 wherein said output interface subsystem further transmits portions of a protocol data unit and said modified argument to said external device.

19. The fast pattern processor as recited in Claim 15 wherein said external device is a routing switch processor.

20. The fast pattern processor as recited in Claim 15 wherein said pattern processing engine further dynamically modifies said modified argument based upon a content of a protocol data unit.

21. The fast pattern processor as recited in Claim 15 wherein said pattern processing engine employs a sequence of operating instructions defined by a functional programing language.